



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

up by the ichthyologists at Stanford. As far as we are able to learn, the ornithological results of the expedition were relatively unimportant.

### PUBLICATIONS REVIEWED

The present reviewer cannot remember to have ever read a book more profitable, and at the same time entertaining, than BEEBE'S "THE BIRD".<sup>1</sup> The brief title at first glance seems to lack sufficient definiteness as to the real nature of the subject-matter. The book has nothing to do with systematic ornithology: species are mentioned merely incidentally; but a multitude of subjects related to evolution and adaptation are dealt with. After all, as we think it over, the book *does* treat of *the bird*, inclusively and broadly. Yet one must have read and studied the whole book to comprehend its scope.

Our first pleasure was in simply "looking at the pictures." Every one of the 371 illustrations are significant *per se* of some fact of bird structure or habit: One does not have to read the context to gain at least some suggestion of what the pictures are meant to show. There is every indication that Mr. Beebe has spent plenty of time in securing the most instructive photos for the bringing out of each desired point.

And the text is as good as the pictures. The style is non-technical, but not too "popular" in most places. Here and there, there is a shade too much of literary ornateness, which to our minds does not strictly harmonize with the scientific treatment of a subject. But this is so inconsequential a criticism, that we feel almost ashamed to have ventured it.

The following are a few of the subjects discussed: The ancestors of birds; growth and structure of feathers; framework of a bird; organs of nutrition (tongues, crops, gizzards); food and feeding-habits of various birds; breath of a bird; senses; wing-structure and flight; theories of coloration; the bird within the egg.

Beebe's "The Bird" is an extraordinary book, and we advise our readers to get this one above any other work on birds of the same size.—J. G.

"THE PROTECTION OF OUR NATIVE BIRDS" is the title of a pamphlet <sup>2</sup> by Professor MONTGOMERY of the University of Texas. In the publication and distribution of such carefully

and convincingly drawn up papers as this, can the educational centers of each state do much to spread the cause of bird protection. As Professor Montgomery suggests, it is thru the *schools* that the knowledge of the value of birds can be emphasized at large. Nature courses in the lower grades are most productive of widespread good, it has seemed to us. The *economic* value of bird-life is what will appeal, by way of the school children, to the adults of the community.

The present paper presents the subject strongly, and cannot fail to have its good effect. So good a service has thus been done by Professor Montgomery that we are quite ready to pardon his extreme attitude in respect to collectors. It is too bad, tho, that people have to go to extremes!—J. G.

In a profound essay on "THE PROBLEM OF THE ORIGIN OF SPECIES," Professor C. O. WHITMAN briefly reviews the progress of our knowledge of the methods of species-formation, and contributes to their further understanding. While agreeing that the majority of animals may be subject to ordinary or fluctuating variation (that is, variation uniformly in all directions), and that evolution in such cases seems to be solely directed by natural selection (or survival of the fittest), Professor Whitman maintains that further, in some cases at least, there is *orthogenesis* as a result of continuous asymmetrical or "definite" variation.

Orthogenesis, as the present reviewer understands it, is the evolution of a linear series of descendants in a definite direction (as regards some one or more specific characters), irrespective of the Darwinian essential of fitness or unfitness and resulting persistence or elimination of individuals. This would conveniently account for the very beginnings of certain structures, now clearly adaptive, but of which we cannot imagine a series of *useful* rudimentary stages.

Professor Whitman has been a strong advocate of experimental evolution and is himself at work along that line. For the past ten years he has had under constant observation a succession of generations of the common pigeon (*Columba livia*). Supplementing these, he makes use of specimens of all available wild species of pigeons and doves. He has selected, for reasons of convenience, as characters for observation, the color-patterns shown on the outer surface (coverts) of the wing. The endeavor was to find a case where he could trace the history of one particular specific character. An ideal case seemed to be provided by the

1 The Bird | Its Form and Function | By | C. William Beebe | Curator [etc., 4 lines] | with over three hundred and seventy illustrations | chiefly photographed from life | by the author | [vignette] | New York | Henry Holt and Company | 1906; pp. xii—496, 1 plate, 371 text figures.

2 The Protection of Our Native Birds | By | Thos. H. Montgomery, Jr. | Professor of Zoology | Bulletin of the University of Texas No. 79, Scientific Series No. 8; Oct. 1, 1906; pages 30].

3 The Problem of the Origin of Species | By Charles Otis Whitman [Reprinted from "Congress of Arts and Sciences, Universal Exposition, St. Louis, 1904", Vol. V; pages 18 (repaged ?)].